

REMARKS

The application has been carefully reviewed in light of the Office Action dated December 12, 2007. Claims 5 and 8-14 were previously withdrawn from consideration. Claims 2 and 3 have been cancelled, and will not be mentioned further. Claims 1, 4, 6, and 7 are presented for examination, of which Claims 1, 6, and 7 are in independent form. Applicant has amended the independent claims to define still more clearly what Applicant regards as his invention, in terms which distinguish over the art of record. Applicant has also made a change in dependency to dependent Claim 4 and to withdrawn Claim 5. Favorable reconsideration is respectfully requested.

In the Office Action, Claims 1, 3, and 4 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent 6,035,103 (Zuber). In addition, Claims 2, 6, and 7 were rejected under 35 U.S.C. § 103 as being obvious from *Zuber*.

As now claimed, the method of Claim 1 is designed to address the issue arising from cluster printing where each color printer or color image output apparatus has a specific device profile. A device profile conforms to the International Color Consortium specification and consists of multiple types of color processing conditions. There is typically one specific, representative device profile for each type of color image output apparatus, which includes color processing conditions generally appropriate for that type of color image output apparatus. The method of Claim 1 executes a developing step that develops input image data into bit map image data, using a particular set of types of color processing conditions that is a subset of the set of types of color processing conditions found in any device profile.

As discussed in the Amendment of June 6, 2007, the method of Claim 1 enables high-quality color printing in the first mode, where it executes the developing step multiple times, each time using a set of color processing condition(s) from the device profile of a respective color image output apparatus and sending the result to that color image output apparatus. It also enables high-speed color printing in the second mode, where it executes the developing step only once, using a set of color processing condition(s) generated from combining multiple sets of color processing condition(s) from the device profiles of multiple color image output apparatus, respectively, and sending the (single) result to all the color image output apparatus. For example, the combination may be done via an averaging operation, although Claim 1 is not limited to this particular example.

Accordingly, the two modes differ in the number of times the developing step is executed and in the set(s) of color processing condition(s) used in executing the developing step. The smaller the number of times the developing step is executed, the higher the image processing speed (assuming that a single unit is used for the execution of the developing step). On the other hand, the more tailored the set of color processing condition(s) used is to a color image output apparatus, the higher the quality of output from that color image output apparatus.

The use of *multiple* types of color processing conditions in a device profile is significant especially when the plurality of color image output apparatus are of different types. When the color image output apparatus are of the same type, their respective device profiles are identical. It might thus make sense to apply gamma correction, dot linearization (to correct the variation in “dot gain”), or other relevant type of color

processing condition with actual condition(s) deviating from those from the shared device profile, one type of condition at a time or in some ad hoc manner, to address the inter-device differences in color printing characteristics. As described in the specification when the color image output apparatus are of different types, however, it would be necessary to employ multiple types of color processing conditions in a device profile in a systematic manner to address the inter-type differences in color printing characteristics. Accordingly, entire device profiles, each consisting of multiple color processing conditions generally appropriate for one respective type of color image output apparatus, would be used separately in the first mode or in combination in the second mode in executing the developing step as described in Claim 1.

Therefore, Claim 1 now recites, in relevant part, “an image processing method for processing an input job in parallel by a plurality of color image output apparatus, each having a device profile that includes multiple types of color processing conditions, said method comprising: a developing step of developing input image data into bit map image data, wherein said developing step includes first and second modes, wherein, in the first mode, the input image data is developed a number of times equal to the number of color image output apparatus, using a set of type(s) of color processing condition(s) from a device profile, including one or more type(s) as to which the color image output apparatus differ from each other, wherein each time the set of color processing condition(s) used corresponds to a respective color image output apparatus and the result obtained is output to that color image output apparatus, and wherein, in the second mode, the input image data is developed once, using an optional set of type(s) of

color processing condition(s)... , and the result obtained is output to the plurality of color image output apparatus.”

The portion of *Zuber* cited in the Office Action as disclosing the two modes as described in Claim 1 does not appear to Applicant to contain any suggestion of the two modes recited in Claim 1. As discussed in the Amendment of June 6, 2007, while the portion discusses two modes, namely the “preferred mode” as referred to in the Office Action and the write-through mode, the two modes differ in when the rasterized data is sent to the print engines, not in the number of times a certain image developing step is executed, nor in the color processing condition used in executing the image developing step. In the Office Action, the Examiner refers to how the software RIP of *Zuber* rasterizes data at different bit depths, leading to differences in color processing parametrization. However, such differences are not what distinguishes the preferred mode and the write-through mode in *Zuber*. Similarly, the Examiner refers to different screening techniques taught in *Zuber*, which are again applicable to both the preferred mode and the writethrough mode.

Moreover, nothing in *Zuber* is believed to disclose or suggest the use of multiple types of color processing conditions in a concerted manner. It appears that all the print engines used in the system of *Zuber* are of the same type (col. 29, line 61, through col. 30, line 23; Fig. 27). Accordingly, color matching is performed only once using the (single) device profile of the generic printer that is utilized in the system. There does seem to be a color mapping block/device that performs manual gamma correction for each print engine to address the inter-device differences in color printing characteristics (Col. 30, Line 33 – Col. 31, Line 48). In addition, the portion of *Zuber* cited in the Office Action as disclosing specifically the second mode as described in Claim 1, while apparently unrelated

to the portion cited as disclosing the two modes as described in Claim 1, discusses a linearizer that computes the dot linearization curve for each print engine as well as a (single) averaging block that computes the average of the dot linearization curves for correcting the (single) rasterizing unit. However, nothing in *Zuber* is believed to teach the use of multiple types of color processing conditions in parallel or in a systematic manner, which is most appropriate for addressing inter-type differences in color printing characteristics.

For these reasons, Applicant submits that Claim 1 is allowable over *Zuber*.

Independent Claims 6 and 7 are apparatus and computer-readable medium claims corresponding to method Claim 1, respectively, and therefore are also believed to be allowable for the same reasons.

Claim 4, the only other claim under consideration at this time, is dependent from independent Claim 1 and is therefore believed allowable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of Claim 4 on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and its entry is therefore believed proper under 37 C.F.R. § 1.116. In any event, however, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, he is respectfully requested to contact Applicants' undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and allowance of the present application.

Applicant's undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

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